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				2672		

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Symmony	09/864,107	VAN LIERE, FILIPS				
Office Action Summary	Examiner	Art Unit				
<u> </u>	Jin-Cheng Wang	2672				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 16 M	arch 2005.					
	action is non-final.					
3) Since this application is in condition for allowar closed in accordance with the practice under E	•					
Disposition of Claims						
4) ☐ Claim(s) 1-19,21,23 and 24 is/are pending in the 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-19,21,23 and 24 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	wn from consideration.					
Application Papers	·					
9)☐ The specification is objected to by the Examine	r.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex		•				
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s)	_					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) 🔲 Interview Summary Paper No(s)/Mail Da					
2) Notice of Draitsperson's Patent Drawing Review (PTO-946) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date		atent Application (PTO-152)				

DETAILED ACTION

Response to Amendment

Applicant's submission filed on 03/16/2005 has been entered. Claims 1, 9, 10, 23, and 24 have been amended. Claims 20 and 22 have been canceled. Claims 1-19, 21, and 23-24 have been newly added.

Response to Arguments

Applicant's arguments with respect to claims 1-19, 21 and 23-24 have been considered but are moot in view of the new ground(s) of rejection based on Echerer et al. U.S. Pat. No. 5,740,267 (hereinafter Echerer) in view of Fenster et al. U.S. Pat. No. 6,461,298 (hereinafter Fenster). As set forth in the subsequent rejection, the Echerer and Fenster combination teaches the claim limitations of the amended claim 1 and similar claims.

For example, Fenster teaches the claim limitation of "enabling the generation of the plurality of different measurement graphics based only upon actuation of said at least one button of said mouse when said pointer symbol is situated on said medical image without actuation of said at least one button of said mouse when said pointer symbol is situated on menus, toolbars and control panels such that the measurement graphics are generated without movement of said pointer symbol outside of said medical image." This is because Fenster discloses in column 19 and 4 that the user can use the graphical input device 38 such as a single button mouse to measure distances and areas of the three-dimensional image within the most recently moved image plane and the user simply needs to use the graphical input device 38 to indicate the two end points over which the distance is to be measured if the user wishes to measure a distance and

the user must identify at least three points if an area is to be measured and the placement of points on the image is done by moving a cursor and the display module 92 connects adjacent points by straight line segments and computes both the overall line length and the area bounded by the lines joining the points using an appropriate scale. In this setting, only a mouse has been placed on the points of the image to measure a distance or an area without activation of menus, toolbars and control panels outside the medical image.

When the pointer symbol is situated on the medical image, a measurement graphics is generated without actuation of one button of the mouse on menus, toolbars and control panels because the pointer symbol is situated on the medical image while the measurement graphics is. generated. The pointer symbol is not situated on menus, toolbars and control panels when the pointer symbol is situated on the medical image. Therefore, the actuation of the at least one button of the mouse enables the generation of the plurality of different measurement graphics including measuring the distance of two points on the medical image and the area encircled by three points on the medical image without actuating at least a button of the mouse when the pointer symbol of the mouse is situated on menus, toolbars and control panels, i.e., when the pointer symbol is subsequently moved away from the medical image after the generation of the measurement graphics. Fenster discloses enabling the generation of the plurality of different measurement graphics including the measurement of distance between two points on the medical image and the measurement of area encircled by more than two points on the medical image based only upon actuation of at least one button of said mouse when said pointer symbol is situated on said medical image without clicking on the mouse, even when the pointer symbol is moved outside the medical image and placed on the menus, toolbars, and control panels outside

the medical image after the measurement graphics is generated. Fenster discloses enabling the generation of the plurality of different measurement graphics including the measurement of distance between two points on the medical image and the measurement of area encircled by more than two points on the medical image based only upon actuation of at least one button of said mouse when said pointer symbol is situated on said medical image without the actuation of the at least one button of the mouse when said pointer symbol is subsequently moved away from the medical image and placed on menus, toolbars, and control panels. Because the pointer symbol is placed on the medical image in the generation of the measurement graphics, the measurement graphics are generated without the movement of the pointer symbol outside of the medical image while the measurement graphics is generated. In conclusion, Fenster discloses the claim limitation of enabling the generation of the plurality of different measurement graphics based only upon actuation of said at least one button of said mouse when said pointer symbol is situated on said medical image without actuation of said at least one button of said mouse when said pointer symbol is situated on menus, toolbars, and control panels such that the measurement graphics are generated without movement of said pointer symbol outside of said medical image.

According to MPEP 2106, Office personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. E-Pass Techs., Inc. v. 3Com Corp., 343 F.3d 1364, 1369, 67 USPQ2d 1947, 1950 (Fed. Cir. 2003) (claims must be interpreted 'in view of the specification' without importing limitations from the specification into the claims

unnecessarily). In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). See also In re Zletz, 893 F.2d 319, 321-22, 13 USPO2d 1320, 1322 (Fed. Cir. 1989).

It would have been obvious to one of ordinary skill in the art to have incorporated the Fenster's measurement method into Echerer's method of processing cursored user interaction because Echerer implicitly suggests providing a menu-less graphical interface for display said medical image (e.g., Echerer column 12, lines 20-30; column 13, lines 25-50) and providing a predefined interaction with said medical image, wherein said interaction is selected from a group of predefined interactions based on said status of each of said at least one button during the interval between multiple said position detection steps (e.g., Echerer column 16, lines 15-67; column 17, lines 1-67; column 18, lines 1-64) therefore suggesting an obvious modification of the Echerer's method for processing a radiograph. One having the ordinary skill in the art would have been motivated to do this because it would have provided an alternative drawing option that does not rely on the menus, control panels and toolbars for GUI control (Fenster column 4 and 19).

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claim 1-19, 21 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Echerer et al. U.S. Pat. No. 5,740,267 (hereinafter Echerer) in view of Fenster et al. U.S. Pat. No. 6,461,298 (hereinafter Fenster).

3. Re Claims 1, 23-24:

(a) Echerer teaches a method for providing and processing a cursored user interaction (column 8, lines 37-67, column 9, lines 1-23) with a spatially displayed medical image (column 7, lines 21-29) and producing graphics related data on said medical image (column 12, lines 42-56), wherein said method comprises the steps of:

Controlling a mouse computer interface device, having at least one button (e.g., column 12, lines 20-30; column 13, lines 25-50);

Displaying a pointer symbol on said graphical interface, wherein said pointer symbol (e.g., a cursor) represents a current position of said mouse on said graphical interface (e.g., column 8, lines 35-55; column 12, lines 20-30; column 13, lines 25-50);

Tracking a status of each of said at least one button (e.g., column 12, lines 20-30; column 13, lines 25-50);

Detecting a position of said mouse, wherein said position detection step is activated upon actuation of one of said at least one button (e.g., column 12, lines 20-30; column 13, lines 25-50; column 15, lines 15-35); and

Generating one of a plurality of measurement graphics related to a predefined set of measurement operations on said medical image upon at least one actuation of said at least one button (herein only mouse is being used instead of the user interface constructs such as ACTION

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BARS or SCROLLABLE PANEL AREAS; see e.g., column 12, lines 20-30; column 13, lines 25-50; column 15, lines 15-35).

Enabling the generation of the plurality of different measurement graphics using said mouse without activation of toolbars and control panels (e.g., column 12, lines 20-30; column 13, lines 25-50; column 15, lines 15-35).

In other words, Echerer further discloses enabling the generation of the measurement graphics without without activation of ACTION BARS or image fields, OR CONTROL PANELS since Echerer teaches using a mouse only without activating ACTION BARS or image fields, OR CONTROL PANELS (See e.g., column 12, lines 20-30; column 13, lines 25-50; column 15, lines 15-35).

- (b) However Echerer is silent to "Enabling the generation of the plurality of different measurement graphics using only said mouse without activation of menus, toolbars and control panels" and "providing a menu-less graphical interface for displaying, essentially unobstructed, said medical image in a substantial portion of said graphical interface."
- (c) Fenster teaches the claim limitation of "enabling the generation of the plurality of different measurement graphics using only said mouse without activation of menus, toolbars and control panels" and "providing a menu-less graphical interface for displaying, essentially unobstructed, said medical image in a substantial portion of said graphical interface" (This is because Fenster discloses in column 19 and 4 that the user can use the graphical input device 38 such as a single button mouse to measure distances and areas of the three-dimensional image within the most recently moved image plane and the user simply needs to use the graphical input device 38 to indicate the two end points over which the distance is to be measured if the user

wishes to measure a distance and the user must identify at least three points if an area is to be measured and the placement of points on the image is done by moving a cursor and the display module 92 connects adjacent points by straight line segments and computes both the overall line length and the area bounded by the lines joining the points using an appropriate scale. In this setting, only a mouse has been placed on the points of the image to measure a distance or an area without activation of menus, toolbars and control panels outside the medical image.

Fenster also teaches similar claim limitations set forth in the claims 23-24).

When the pointer symbol is situated on the medical image, a measurement graphics is generated without actuation of one button of the mouse on menus, toolbars and control panels because the pointer symbol is situated on the medical image while the measurement graphics is generated. The pointer symbol is not situated on menus, toolbars and control panels when the pointer symbol is situated on the medical image. Therefore, the actuation of the at least one button of the mouse enables the generation of the plurality of different measurement graphics including measuring the distance of two points on the medical image and the area encircled by three points on the medical image without actuating at least a button of the mouse when the pointer symbol of the mouse is situated on menus, toolbars and control panels, i.e., when the pointer symbol is subsequently moved away from the medical image after the generation of the measurement graphics. Fenster discloses enabling the generation of the plurality of different measurement graphics including the measurement of distance between two points on the medical image and the measurement of area encircled by more than two points on the medical image based only upon actuation of at least one button of said mouse when said pointer symbol is situated on said medical image without clicking on the mouse, even when the pointer symbol is

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moved outside the medical image and placed on the menus, toolbars, and control panels outside the medical image after the measurement graphics is generated. Fenster discloses enabling the generation of the plurality of different measurement graphics including the measurement of distance between two points on the medical image and the measurement of area encircled by more than two points on the medical image based only upon actuation of at least one button of said mouse when said pointer symbol is situated on said medical image without the actuation of the at least one button of the mouse when said pointer symbol is subsequently moved away from the medical image and placed on menus, toolbars, and control panels. Because the pointer symbol is placed on the medical image in the generation of the measurement graphics, the measurement graphics are generated without the movement of the pointer symbol outside of the medical image while the measurement graphics is generated. In conclusion, Fenster discloses the claim limitation of enabling the generation of the plurality of different measurement graphics based only upon actuation of said at least one button of said mouse when said pointer symbol is situated on said medical image without actuation of said at least one button of said mouse when said pointer symbol is situated on menus, toolbars, and control panels such that the measurement graphics are generated without movement of said pointer symbol outside of said medical image.

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(d) It would have been obvious to one of ordinary skill in the art to have incorporated the Fenster's measurement method into Echerer's method of processing cursored user interaction because Echerer implicitly suggests providing a menu-less graphical interface for display said medical image (e.g., Echerer column 12, lines 20-30; column 13, lines 25-50) and providing a predefined interaction with said medical image, wherein said interaction is selected from a group of predefined interactions based on said status of each of said at least one button during the

interval between multiple said position detection steps (e.g., Echerer column 16, lines 15-67; column 17, lines 1-67; column 18, lines 1-64) therefore suggesting an obvious modification of the Echerer's method for processing a radiograph.

(e) One having the ordinary skill in the art would have been motivated to do this because it would have provided an alternative drawing option that does not rely on the menus, control panels and toolbars for GUI control (Fenster column 4 and 19).

Claim 2:

The claim 2 encompasses the same scope of invention as that of claim 1 except additional claimed limitation that a single-point actuating/positioning assigns an actual pixel position and/or a pixel intensity quantity to the point in question. However, Echerer and Fenster further disclose the claimed limitation that a single-point actuating/positioning assigns an actual pixel position and/or a pixel intensity quantity to the point in question (e.g., Echerer column 12, lines 42-56; Fenster column 19).

Claim 3:

The claim 3 encompasses the same scope of invention as that of claim 1 except additional claimed limitation that a point pair actuating/positioning assigns a distance value to the pair in question. However, Echerer further discloses the claimed limitation that a point pair actuating/positioning assigns a distance value to the pair in question (e.g., column 13, lines 12-49, column 15, lines 9-11).

Claim 4:

The claim 4 encompasses the same scope of invention as that of claim 1 except additional claimed limitation that a triple-point actuating/positioning assigns an angle value quantity to a middle point of the triple. However, Echerer further discloses the claimed limitation that a triple-point actuating/positioning assigns an angle value quantity to a middle point of the triple (column 15, lines 12-19).

4. Claim 5:

The claim 5 encompasses the same scope of invention as that of claim 1 except additional claimed limitation that "multiple-point actuating/positioning for an open or closed point sequence assigns an area value quantity to a concave region delimited by the sequence in question". However, Fenster further discloses the claim limitation of multiple-point actuating/positioning for an open or closed point sequence assigns an area value quantity to a concave region delimited by the sequence in question (*This is because Fenster discloses in column 19 and 4 that the user can use the graphical input device 38 such as a single button mouse to measure distances and areas of the three-dimensional image within the most recently moved image plane and the user simply needs to use the graphical input device 38 to indicate the two end points over which the distance is to be measured if the user wishes to measure a distance and the user must identify at least three points if an area is to be measured and the placement of points on the image is done by moving a cursor and the display module 92 connects adjacent points by straight line segments and computes both the overall line length and the area bounded by the lines joining the points using an appropriate scale).*

5. Claim 6:

The claim 6 encompasses the same scope of invention as that of claim 1 except additional claimed limitation that "a freehand-drawn actuating/positioning for an open or closed point sequence assigns an area value quantity to a concave region delimited by the sequence in question". However, Fenster further discloses the claim limitation of a freehand-drawn actuating/positioning for an open or closed point sequence assigns an area value quantity to a concave region delimited by the sequence in question (This is because Fenster discloses in column 19 and 4 that the user can use the graphical input device 38 such as a single button mouse to measure distances and areas of the three-dimensional image within the most recently moved image plane and the user simply needs to use the graphical input device 38 to indicate the two end points over which the distance is to be measured if the user wishes to measure a distance and the user must identify at least three points if an area is to be measured and the placement of points on the image is done by moving a cursor and the display module 92 connects adjacent points by straight line segments and computes both the overall line length and the area bounded by the lines joining the points using an appropriate scale).

6. Claim 7:

The claim 7 encompasses the same scope of invention as that of claim 1 except additional claimed limitation of "a multiple-point actuating/positioning for an open or closed point sequence assigns a poly-line measurement quantity to the sequence so drawn". However, Fenster further discloses the claim limitation of a multiple-point actuating/positioning for an open or closed point sequence assigns a poly-line measurement quantity to the sequence so drawn (*This is because Fenster discloses in column 19 and 4 that the user can use the graphical*

input device 38 such as a single button mouse to measure distances and areas of the three-dimensional image within the most recently moved image plane and the user simply needs to use the graphical input device 38 to indicate the two end points over which the distance is to be measured if the user wishes to measure a distance and the user must identify at least three points if an area is to be measured and the placement of points on the image is done by moving a cursor and the display module 92 connects adjacent points by straight line segments and computes both the overall line length and the area bounded by the lines joining the points using an appropriate scale).

7. Claim 8:

The claim 8 encompasses the same scope of invention as that of claim 1 except additional claimed limitation of "for an open or closed point sequence assigns a poly-line measurement quantity to the sequence so drawn". However, Fenster further discloses the claim limitation of a freehand-drawn actuating/positioning for an open or closed point sequence assigns a poly-line measurement quantity to the sequence so drawn (This is because Fenster discloses in column 19 and 4 that the user can use the graphical input device 38 such as a single button mouse to measure distances and areas of the three-dimensional image within the most recently moved image plane and the user simply needs to use the graphical input device 38 to indicate the two end points over which the distance is to be measured if the user wishes to measure a distance and the user must identify at least three points if an area is to be measured and the placement of points on the image is done by moving a cursor and the display module 92 connects adjacent

points by straight line segments and computes both the overall line length and the area bounded by the lines joining the points using an appropriate scale).

8. Claim 9:

The claim 9 encompasses the same scope of invention as that of any of Claims 2 to 8 except additional claimed limitation of assigning a pixel staticizing to an assigned geometrical entity. However, Echerer further discloses the claimed limitation of assigning a pixel staticizing to an assigned geometrical entity (column 9, lines 1-23, column 15, lines 9-11).

9. Claims 10-13:

The claim 10, 11, 12, 13 encompasses the same scope of invention as that of claim 1, 2, 3, 4 respectively except additional claimed limitation of "an apparatus". However, Echerer further discloses the claimed limitation of "an apparatus" (column 5, lines 12-37).

10. Claims 14-18:

The claim 14, 15, 16, 17, 18 encompasses the same scope of invention as that of claim 5, 6, 7, 8, 9 except additional claimed limitation of "an apparatus". However, Echerer further discloses the claimed limitation of "an apparatus" (column 5, lines 12-37).

Claim 19:

The claim 19 encompasses the same scope of invention as that of claim 1 except additional claimed limitation of a machine-readable computer program. However, Echerer

further discloses the claimed limitation of "a machine-readable computer program (column 9, lines 30-36, figures 6-9).

11. Claim 21:

The claim 21 encompasses the same scope of invention as that of claim 1 except additional claimed limitation of the step of enabling the generation of the measurement graphic without requiring a user to define a type of graphic being generated.

However, Fenster further discloses the claim limitation of the step of enabling the generation of the measurement graphic without requiring a user to define a type of graphic being generated (This is because Fenster discloses in column 19 and 4 that the user can use the graphical input device 38 such as a single button mouse to measure distances and areas of the three-dimensional image within the most recently moved image plane and the user simply needs to use the graphical input device 38 to indicate the two end points over which the distance is to be measured if the user wishes to measure a distance and the user must identify at least three points if an area is to be measured and the placement of points on the image is done by moving a cursor and the display module 92 connects adjacent points by straight line segments and computes both the overall line length and the area bounded by the lines joining the points using an appropriate scale).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jin-Cheng Wang whose telephone number is (703) 605-1213. The examiner can normally be reached on 8:00 - 6:30 (Mon-Thu).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Razavi can be reached on (703) 305-4713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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jcw

MICHAEL RAZAVI SUPERVISORY PATENT EXAMINER TEXT DUNGY CONTER 2800